THE PARQ

SMART BUILDING

SECURITY MANAGEMENT

The PARQ features a centralised, integrated security system that is designed to work 24/7 both within the complex and its external surrounds. Closed-circuit televisions will be set up in common areas of the project and will be connected to an Integrated Command Centre and Access Control System.

VIDEO ANALYTICS

The closed-circuit televisions feature a video analytic algorithm to ensure a high level of security and facilitate overall building management. The algorithm enables staff to take timely action should they detect suspicious people or items, accidents, or invaders in a restricted area.

VISITOR MANAGEMENT (INTEGRATION WITH ACCESS CONTROL SYSTEM)

The highly efficient visitor management system will help minimise time spent exchanging ID cards for building access. It tightens loopholes and solves pain points inherent in the traditional reception desk method. Moreover, the system comes with a database to maintain detailed records of each individual's arrival and departure times.

- There will be a self-registration kiosk in The PARQ lobby to enable visitors to get proximity cards ('contactless' access cards) by scanning their ID cards or business cards and following on screen prompts. This will reduce the number of staff required at the front reception desk and will minimise the time spent registering each visitor.
- Tenants can pre-register by inputting their visitors' information into the system and forwarding the corresponding QR code in advance. Upon arrival visitors can scan this QR code at the automated turnstiles to access the building. The relevant tenants will be instantly notified of the visitors' arrival.
- An administrator can set some security policies such as determining areas and hours that some visitors can enter.

CAR PARK MANAGEMENT

The PARQ's Smart Parking System will help direct drivers to a suitable vacant parking slot. It will reduce traffic congestion within the building and minimise time spent trying to find an available parking slots. This also reduces vehicle emissions.

AIR QUALITY MONITORING

The PARQ air conditioning and air ventilation systems come with air filters that can filter dust and harmful particulate matter (PM) as small as PM 10 (10 micrometres which is equivalent to ten times smaller than human hair diameter) with the potential to harm the human respiratory system. There is an automatic sensor that will notify the Command Centre when each filter needs to be replaced and when it detects harmful particles, so that immediate and appropriate action can be taken.

SMART POLE

The PARQ complex will include multi-purpose Smart Poles. They provide a connected light source as well as security features via integrated CCTV cameras and an emergency button. They also serve as Wi-Fi access points outside of the building, enable mobile phone charging and feature a Public Announcement (PA) speaker. Furthermore, they contain environmental and microclimatic sensors to measure temperature and humidity.

The Smart Poles also act as air quality monitoring units and contain a sensor to detect dust and harmful particulate matter (PM) as small as PM 10 with the potential to harm the human respiratory system.

All information from the Smart Poles is relayed back to the Command Centre so that immediate and appropriate action can be taken.

INTEGRATED ENERGY MANAGEMENT AND BUILDING

The PARQ's integrated energy management system delivers efficiency, effectiveness and flexibility. It will also respond to tenant demands and deliver enhanced indoor life quality for office workers and visitors. Features and benefits include:

- 13% energy saving compared to international energy efficiency standard, to support the policy of reducing greenhouse gas effects.
- Superior sanitation with an air purification system to filter and sanitise air.
- Reverse osmosis filtered drinking water on every floor.
- Lifts and escalators with minimised waiting times.
- Integrated building security includes a fire alarm system, an earthquake-resistant structure, an emergency generator system and LEED and WELL standard criteria.

SMART METERS

Information on energy usage including electricity, water and air conditioners will be collected by smart meters and fed into the centralised Command Centre. The weather and temperature will also be measured and monitored. This information will be converted into infographics to be displayed in the lobby. It can also be compared with the historical records e.g. Last Week VS Last Month.

- The system can respond to situations in real time and appropriately as smart meters collect information throughout The PARQ complex. For example, when it gets too crowded in the lobby, the temperature may rise and make occupants feel uncomfortable. The system constantly monitors each area of the building and will detect this change in temperature. As a consequence, it is able to automatically increase air volume and adjust temperature in the lobby area to maintain a comfortable ambient.

OFF-HOUR AIR-CON REQUESTING SYSTEM

The PARQ tenants will have separate accounts and can request to building operator for the turn-on and turn-off time of off-hour air conditioner in their office. . Should air conditioning bills exceed the buildings standard pricing, detailed records of the amount exceeding will be provided. With the smart building management system, the tenants' additional expenses such as after-hour air conditioning are likely to be reduced.

INTEGRATED BILLING (TENANT BILLING SYSTEM)

Rental bills for The PARQ tenants will contain a detailed breakdown of energy usage gathered by smart meters. This will include electricity, water, air conditioners and etc. Tenants can monitor their current usage online. Moreover, single invoices and reports from actual usage will be delivered to each tenant. The reports are based on hourly usage and tenants can access historic data (hourly, daily, and monthly) from their previous usage for their own energy analysis. This enables tenants to control their energy usage and look for further efficiencies.

EV CHARGING

A dedicated parking area for electrical vehicles (EV) with the EV charger will be provided.